

1915

## UA94/6/1 Julia Hayes Student Papers

Julia Hayes

Follow this and additional works at: [http://digitalcommons.wku.edu/stu\\_alum\\_papers](http://digitalcommons.wku.edu/stu_alum_papers)



Part of the [Home Economics Commons](#)

---

### Recommended Citation

Hayes, Julia, "UA94/6/1 Julia Hayes Student Papers" (1915). *Student/Alumni Personal Papers*. Paper 30.  
[http://digitalcommons.wku.edu/stu\\_alum\\_papers/30](http://digitalcommons.wku.edu/stu_alum_papers/30)

This Other is brought to you for free and open access by TopSCHOLAR®. It has been accepted for inclusion in Student/Alumni Personal Papers by an authorized administrator of TopSCHOLAR®. For more information, please contact [topscholar@wku.edu](mailto:topscholar@wku.edu).

THE  
ATLAS SCIENCE TABLET

FOR  
Laboratory Notes and Drawings

IN

DOMESTIC SCIENCE

School W. K. S. N. S. Year 1913  
Pupil Julia Hayes Room Cum.  
Instructor Miss Eva Scott

Arranged by EMANUEL R. BOYER  
(Revised Edition)

Manufactured and Published by  
BECKLEY-CARDY COMPANY  
312 West Randolph Street  
CHICAGO



## METHOD OF ORAL RECITATION.

The pupil should prepare on all the topics of the lesson by reference to as many different books as possible. When a topic is assigned him for recitation he should stand and say in a few simple sentences what he knows. Every sentence should be grammatically correct, and the thought of the teacher should be upon the language. If the pupil should speak incorrectly he should generally be stopped and allowed to correct himself, although it would be folly to introduce any grammatical discussions. The pupil will soon learn to feel uncomfortable over a slip of the tongue and will correct himself.

The pupil should generally strive to give something which the members of the class do not know. He should speak freely his own thoughts and in his own simple language.

For a short course the topics of the first column are considered sufficient. Those of the second column are for a longer course, and those of the third column are optional.

## THE WRITTEN EXERCISE.

As soon as possible after the oral recitation the pupil should write on the page opposite the topics as much as he can remember of the recitation which he has given in class. This should be properly headed with subject and date.

Great care should be taken to paragraph and punctuate correctly. Errors in the oral recitation should not appear in the written exercises and should be avoided in the next oral recitation.

Marginal drawings add much to the beauty of this exercise, and the author recommends pen sketches of object and maps.

Do not allow the use of the language of any author in reciting. That would be plagiarism, which is as improper as any other form of stealing. To avoid this it is better not to take written notes while reading. Quotations may sometimes be used if the proper marks are used and the author mentioned. Poetical quotations are always useful. Drawings may be copied, but are better made from memory, and best of all drawn from the object.



Domestic Arts.

10:10 to 12



# Domestic Art.

## I Contents of work box.

- 1 Thimble.
- 2 Scissors.
- 3 Tape measure.
- 4 Pins
- 5 Emery cushion or chamois.
- 6 Piece of cloth or heavy flannel in which to keep needles.
- 7 Buttonhole Scissors

## II Directions for measuring thread.

- 1 Loose measure from shoulder to shoulder.
- 2 Over the hand and around the elbow.
- 3 From shoulder to waistline.

## III Directions for threading a needle.

- 1 To thread needle with sewing thread.

<sup>a</sup> Cut the thread from the spool on the diagonal.

<sup>b</sup> Put the end of the thread cut nearest needle in the eye of the needle.

<sup>c</sup> Hold the needle with the eye



up, with the thumb and finger of the left hand. Twist the end of the thread, cut from the spool without moistening. place thru the eye of the needle and draw about  $\frac{1}{3}$  the way thru

2 To thread the needle with German-town yarn.

- <sup>a</sup> Hold yarn with thumb and finger of left hand
- <sup>b</sup> Place the point of the needle over the fore finger and remove the thumb. Pull the end of the yarn over the needle and hold firmly with the thumb nail.
- <sup>c</sup> Without removing the thumb, draw the needle thru. This leaves a flat firm hold which readily works into the eye of the needle.

#### IV. Directions for tying a knot.

- 1 Hold the thread in thumb and finger of left hand.
- 2 Wrap the thread around finger until it meets the



other end. Twist and draw the short end thru the loop. Draw until tight. Clip with scissors any of the end that may remain.

#### V Definition of a stitch.

1. A stitch is the amount of material that the needle passes over and under at one motion.



# Model One.

7.

## I Material.

- 1 Java canvas.
- 2 Germantown yarn (two colors)
- 3 Tapestry or rug needle No. 21.

## II Problem.

- 1 To make the following stitches:

- a-Running.
- b-Even hasting.
- c-Uneven hasting.
- d-Back stitch.
- e-Combination stitch.
- f-Overcasting.
- g-Overhanding.
- h-Catch stitch

## III Method.

- 1 Running stitch

- a- Hold the canvas so that the long way runs from right to left.
- b- Having threaded the needle with the yellow German-town yarn. and tying



the knot, in the upper right hand corner, count down and into the third hole. Bring the needle thru from the under to the top side.

- c- Working from right to left, the needle passes over one space and under one space.
- d- Continue the running stitch across canvas to the third or fourth hole.
- e- Fasten the thread on the canvas on the wrong side with two or three small stitches, one on top of the other, directly over the part of the stitch made last.
- f- Make two rows of the running stitches, omitting a row of holes.

g- Even Basting



a- Count two holes down and three holes in as before.

b- The even hasting is made exactly like the running stitch, except the needle passes under and over two spaces.

c- Make two rows with no holes between.

3-- Uneven hasting.

a- Skip one row of holes.

b- Continue same as even hasting, except over two and under one space.

4 Back stitch.

a- Begin two spaces down and three spaces in and make one running stitch.

b- Go back over the last half of the stitch and come up in the hole two spaces to the left.



- c- Continue this across the canvas.
- d- Make two rows.

## 5-- Combination stitch.

- a- Begin two spaces down and three spaces in and make one running stitch.
- b- Place the needle thru the hole one space to the right, allowing it to pass up in the hole two spaces to the left.
- c- Make two running stitches.
- d- Continue same making two rows across canvas.

## 6-- Quercasting.

- a- Count down three holes and in three holes, bring the needle thru the hole.
- b- Carry the needle up one space and diagonally to the left one space. Bring the needle up, diagonally, down one space



and to the left one space.

c- Make two rows overcasting

## 7-- Overhanding.

a- Count down three spaces.

b- Carry needle diagonally up and one space to the left and bring it down.

c- Make two rows.

## 8-- Catch stitch.

a- Count down four spaces from left to right three holes.

b- Bring the needle from the underside to the top thru this hole.

c- Carry needle diagonally two spaces up and two spaces to the left and bring up one space to the right.



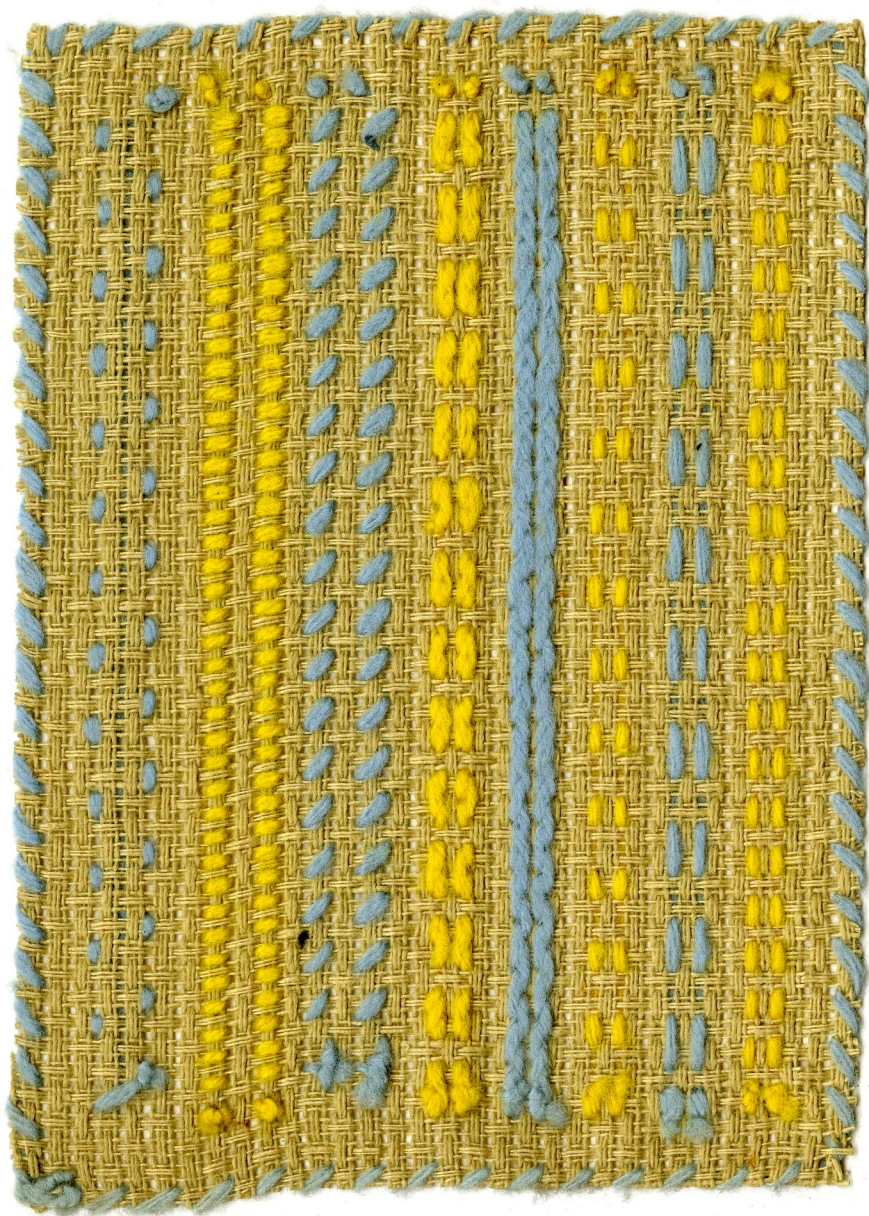
d- Place needle diagonally thru the hole two spaces down and two spaces to the right and bring up one space to the left.

e- Make one row of Catch stitch,

9-- Trim all threads and frayed edges so it will be even on all sides.

Overcast your model.







## Model Two.

### I Material

- 1 Domestic  $3\frac{1}{2} \times 4$  inches.
- 2 Domestic  $3\frac{1}{2} \times 4$  "
- 3 Domestic  $3\frac{1}{2} \times 4$  "
- 4 Paper  $3\frac{1}{2} \times 4$  "
- 5 Blue basting thread No. 60.
- 6 Needle No. 9.
- 7 Card for making marker.

### II Problem.

- 1 To turn  $\frac{1}{2}$  in. hem on paper.
- 2 To turn  $\frac{1}{2}$  in. hem on domestic, and baste with even basting, stitch to be  $\frac{1}{2}$  in. long.
- 3 To turn and baste  $\frac{1}{2}$  in. hem in domestic, using uneven basting.
- 4 To make  $\frac{1}{4}$ ,  $\frac{1}{2}$  and 1 inch marker on cardboard.
- 5 Hemming.

### III Turning of paper hem.

- a Across long way of paper make a  $\frac{1}{4}$  in. turning.
- b. Turn and press firmly in place a  $\frac{1}{2}$  inch hem.



2-- To make a  $\frac{1}{2}$  inch hem.

- a- Turn  $\frac{1}{2}$  in. on domestic, parallel with woof, as you did the paper turning.
- b- A knot of the thread is to be on the wrong side of the hem.
- c- Baste as nearly on the edge of the hem and as straight as possible.
- d- Fasten thread with two or three small stitches, one on top of the other.

3-- To make a one-inch hem.

- a- Turn exactly as for  $\frac{1}{2}$  in. hem only wider.
- b- Uneven basting, stitch is to be  $\frac{1}{2}$  in. long; passing over  $\frac{3}{8}$  of an inch, taking up  $\frac{1}{8}$  of an inch.
- c- Knot and fasten same as before.

4- Marker.

- a- From one end measure  $\frac{1}{4}$  inch; make a short line in from this point.

- b- Counting down side of long line make a diagonal cut to this line and remove the angle thus far.
- c- Measure up 1 inch and continue same as  $\frac{1}{4}$  inch measure.
- d- Measure up 1 inch and continue as before.

## 5- Hemming.

- a- Baste a 1 in. hem with uneven basting.
- b- Fasten thread on wrong side with two small stitches. Placing the end of the thread under the edge of the hem immediately below and on the body of the material, taking up one or two threads. The needle passes thru the cloth as nearly parallel as possible. As needle comes thru body of material the point must come thru the edge of the hem. The next stitch about  $\frac{1}{32}$  of an inch to the left of the preceding stitch.



B-- Querhand the model.

Note 1 - Method of determining the warf from the woof.

1-- Warf.

a- Salvage

b- Design

c- Appearance of threads.

Thread is smaller, firmer, and more nearly round in the warf.

d- Snapping.

1 The warf threads produce a sharp quick sound.

2-- Woof.

a- Appearance of thread.

1 Softer, longer and has less tension.

2 Full of little waves.

b- Snapping.

1 Produces a low dull sound.

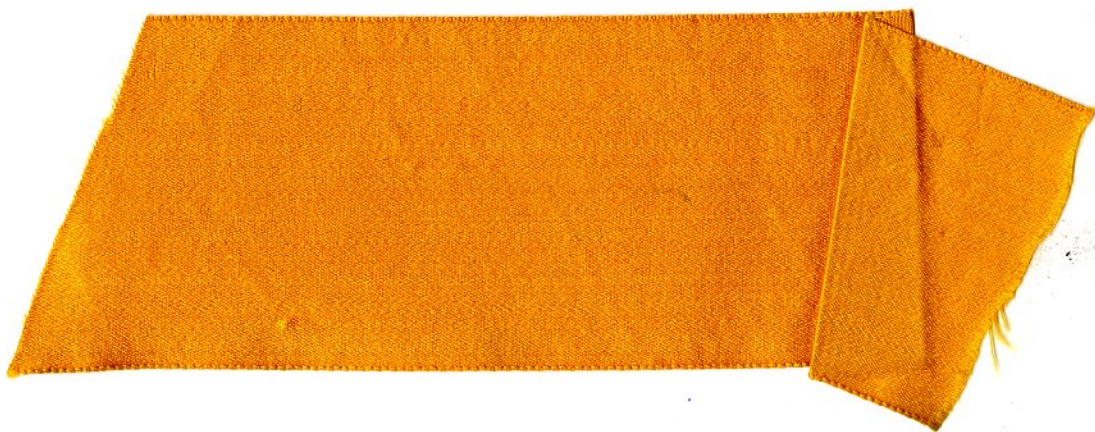
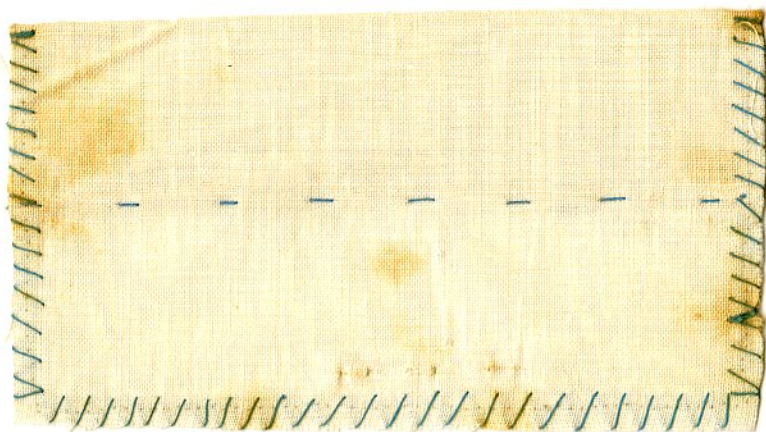
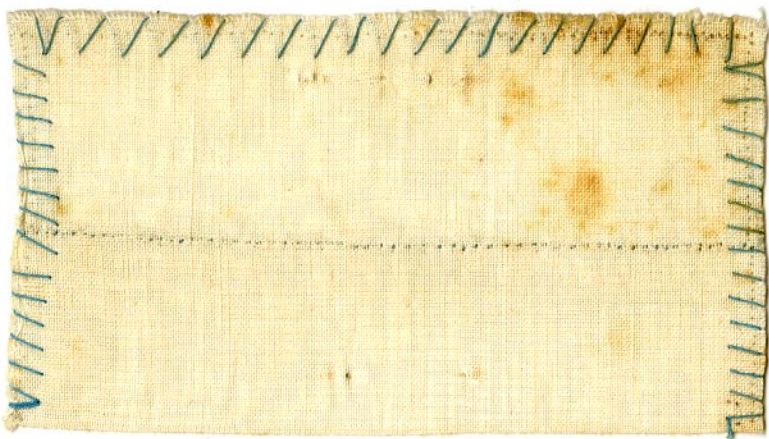
Note 2- Directions for straightening material.

1- Tear or cut from bolt with woof threads.

2- Always trim frayed edges.









## Model Three.

### I Pillowslip.

#### a- Material

- 1 Domestic  $7\frac{1}{2} \times 9$  inches
- 2 White thread No. 80.
- 3 Blue basting thread.
- 4 Needle No. 8.

### II Problem.

- a To make a pillowslip  
4 x 6 when finished.

### III Method.

- 1- Parallel with woof make a  $\frac{1}{4}$  inch turning.
- 2- Parallel with warp across each side make a  $\frac{1}{4}$  inch turning.
- 3- Turn so the turning will be on the wrong side with the two corners exactly together and held in place with a pin.
- 4- Across the end place the folded edges exactly together and pin in the middle.



when possible put the pin at right angle with the edge.

5-- Place edges exactly together on sides and pin in place.

6- With blue thread, starting at the folded edge in the upper right hand corner, haste across end and up the side with uneven hasting.

7- Holding pillow case in left hand with fold to the right and open end down, begin the overhanding.

a- Fasten the thread exactly in the corner of the turned edge, with two small stitches, one on top of the other.

b- Overhanding stitches must be small, taking up one or two threads in the depth of seam. Each time the needle is placed in the cloth it will not be

more than  $\frac{1}{6}$  of an inch from the previous stitch. No knots are allowed.

c - Overhand ends of thread to prevent it from pulling out

d - To close and begin a new thread, leave  $\frac{1}{4}$  in. old thread. Begin new thread by fastening two small stitches over the last thread, and overhand the two ends of the thread instead of one, as when first started

8- Turning the hem

a - Make a  $\frac{1}{4}$  in. turning, turn hem  $1\frac{1}{4}$  in. wide.

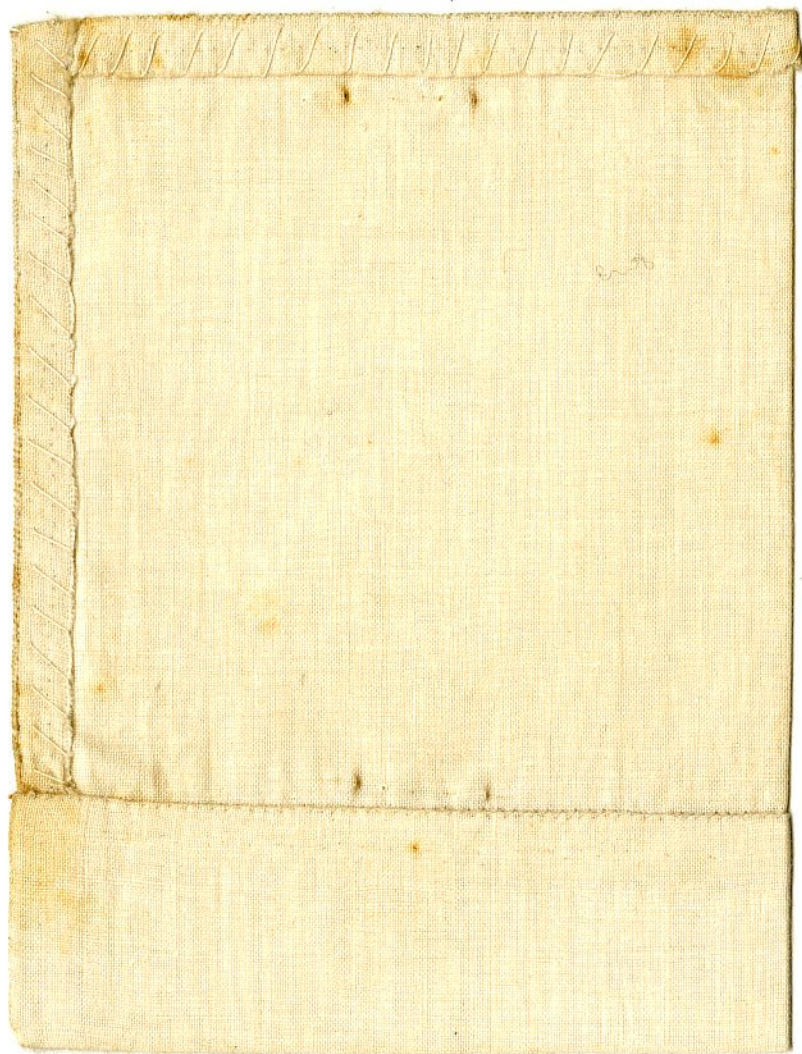
b - The seam in the hem should come exactly over the seam in the side of the pillowslip.

c - Baste the hem using uneven basting

d - Hem as in other model.

9. Overcast raw seams.





## Model 4

### I Ruffle

#### Material

- 1 Domestic  $5\frac{1}{2} \times 1\frac{1}{2}$ "
- 2 Domestic  $3\frac{1}{2} \times 7$ "
- 3 Basting thread (blue)
- 4 White thread No. 80

### II Method:

Across ends of the domestic  $3\frac{1}{2} \times 7$  make  $\frac{1}{8}$ " hem.

Across one side make  $\frac{1}{2}$ " hem with  $\frac{1}{4}$ " turning, baste.

III Gather the other side using the running stitch, making same about  $\frac{1}{8}$ " long. (Small stitches to make gathers fine)

Begin gathering at the right hand upper corner, holding the wrong side toward you, and the  $\frac{1}{2}$ " hem down.

About  $\frac{1}{4}$ " from top, make the last come near edge of the  $\frac{1}{8}$ " hem on both sides.



#### IV To stroke gathers

<sup>a</sup> Place a pin in the  $\frac{1}{8}$ " hem at right angle to gathering thread

<sup>b</sup> Draw thread as tight as you can and wrap around pin to form a figure 8.

Unthread the needle and stroke gathers with the eye of the needle. (Knots in thread are not permissible in gathering)

Loosen thread that is wrapped around pin, leaving the gathering thread 5" long.

#### V To put on band

<sup>a</sup> Turn ruffle with wrong side toward you, make  $\frac{1}{4}$ " turning at the ends of the band

#### VI Problem

<sup>a</sup> To make and place a ruffle on a band.

b--Place a notch or mark at one edge of the band in the middle.

c--Notch in center of ruffle.

d. Place notch of ruffle even with turnings on band and match notches

e--Turn right sides together and baste ruffle to band with a back stitch seam on gathers.

f-- Make  $\frac{1}{4}$ " turning on the loose edge of the band.

g-- Turn over to the wrong side of ruffle and place the folded edge of band even with stitches in gathers, and baste and hem down.

h-- Overhand ends of bands.





## Model 5

### I Material

- 1 Checked gingham 7 x 11
- 2 White thread No. 80.
- 3 Needle No. 8.

### II Problem

To make an apron.

### III Method.

1. Parallel with <sup>warf</sup> ~~warf~~ threads cut from one end a strip  $1\frac{1}{2}$ " wide.
2. Remainder of material fold in middle and cut in half.
3. Fold one piece in middle parallel with <sup>warf</sup> ~~warf~~, and cut.
4. Place the two side gores, one on each side of front gore, matching stripes as nearly as possible. Baste, allowing enough room to have the seam  $\frac{1}{4}$ " when finished.
5. Hold front gore of apron towards you and use combination stitch in sewing seams.



- 6-- On each side of the apron turn to make a hem  $\frac{1}{8}$ " or less.
- 7-- Across the bottom turn and make a hem  $1\frac{1}{4}$ " wide.
- 8-- Overhand ends of wide hem together
- 9-- Overcast the raw seams together
- 10-- Mark by notches or pin in middle and put in gathering thread exactly as in ruffle.
- 11-- From each end of band measure  $1\frac{1}{4}$ " and mark with notch or dot. Also divide band in middle and mark with notch or dot.
- 12-- Place center of apron to center of band and hem on notches. Adjust gathering thread
- 13 adjust gathering thread
- 14 Sew apron to band with back stitch.

15- Make  $\frac{1}{4}$ " turning on ends of band and allow 1" space from apron to end of band.

16- Turn long side of band over so that the corners are even, and baste.

17-- Overhand ends of band and hem band to apron.







## Model C.

White square patch.

### I Material

- 1 Domestic 6 x 6
- 2 Domestic 3 x 3
- 3 White thread No. 80
- 4 Basting thread
- 5 Needle No. 9.

### II Problem

To make a hem patch.

### III Method

Trim all frayed edges  
Straighten and determine  
warp and woof of both pieces.

Place a pin parallel with  
warp threads in each piece.

Make a  $\frac{1}{8}$ " turning all around  
the patch.

Find the center of each, (patch  
and 6" piece) Place the two  
centers together. The warp in  
each piece must be parallel.

2 - Place patch on larger  
piece, pin corners and baste.

3 - Turn hem to the square.

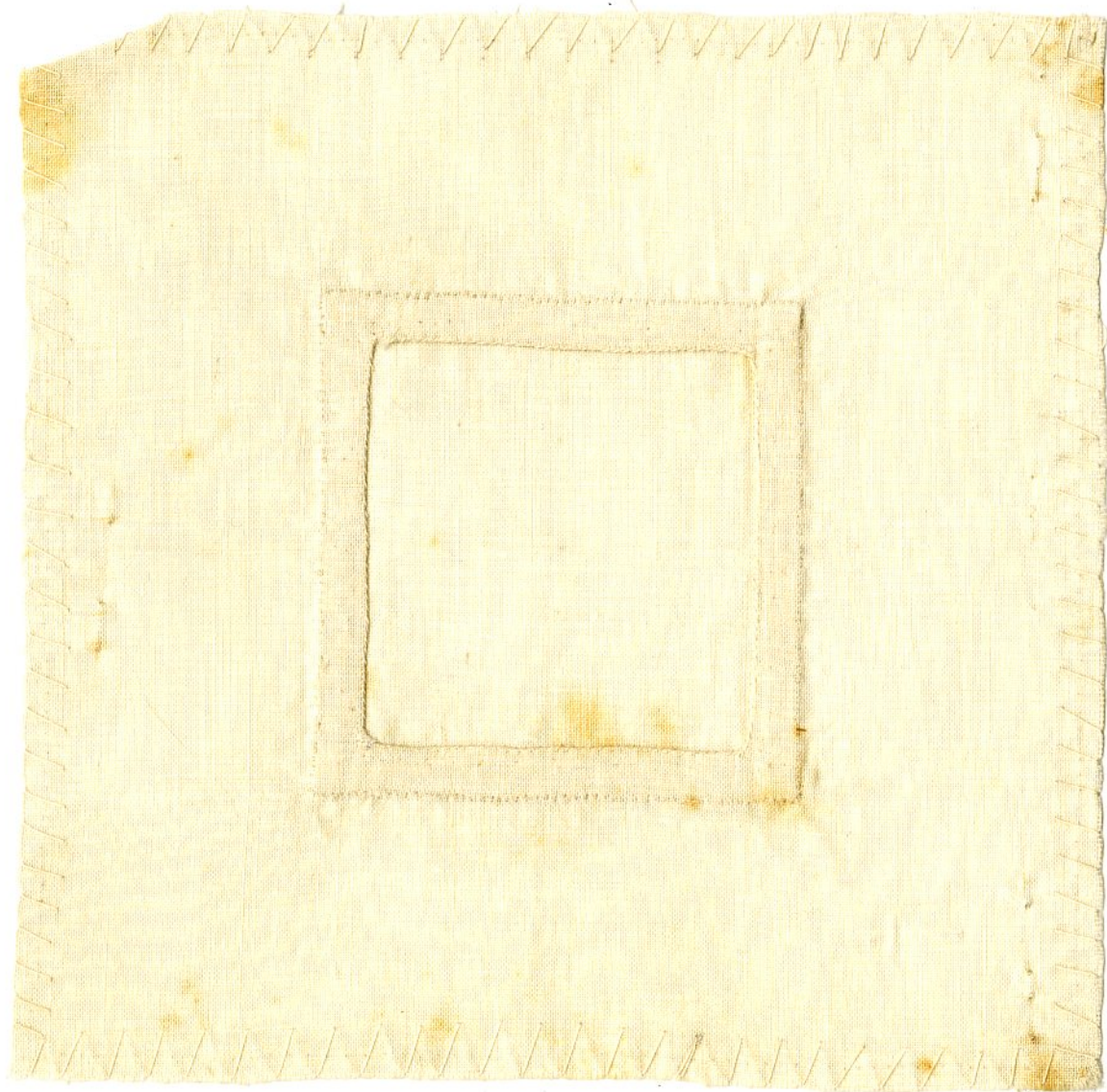
4 - Turn 6" square over.

5 - Cut from the center of the



square towards the sides  
and within  $\frac{3}{8}$ " of the hemming.

- 6 - Clip the corners diagonally  
for  $\frac{1}{8}$ " turning. Baste and hem.
- 7 - Overcast the edges of the 6" square.





## Model 7.

Patch set in on checked gingham.

### I Material

- 1- Gingham 6x6
- 2- Gingham 3x3
- 3- White thread No. 80.
- 4- Basting thread No. 60.
- 5- Needle No. 9.

### II Problem:

To set in a patch, matching checks, paying special attention to the corners so they cannot be detected.

### III Method:

- 1- Find warp of both pieces.
- 2- Place patch in center as nearly as possible.
- 3- Make turning on patch all around the width of two checks.  
The turnings must be exactly on a line between the checks.  
(Why?) ans. To match checks.
- 4- Lay patch on 6" square parallel with warp. Right side up.
- 5- Pin in place.
- 6- Locate corners to which cutting must be made and the sides

for turning.

7- Cut diagonally from the center.  
The cut must come exactly  
at the corner of the check.

8- Turn corners back exactly on  
a line between checks.

9- Place patch in hole. Both  
pieces right side up. (Why?) To  
match checks

10- Turn patch and 6" square so  
the wrong side is up

11- Take the edge nearest you  
and place the right sides to-  
gether.

12- Baste this side in place, match-  
ing checks and the material  
four double.

13- At the corners place sides  
of both together and baste.

14- Continue until the patch  
is basted into the whole.

15- Overhand patch in place tak-  
ing a very slight hold.

16- Overcast the raw edges of patch.

17- Trim off the points, leaving the  
width of two checks at corner of  
patch where the edges are



tunred up.

18 Overcast edges of 6" square.

### Model 8.

To match striped gingham.

#### I Material.

- 1 Striped gingham 6 x 6.
- 2 White thread No. 80.
- 3 Basting thread No. 60.
- 4 Needle No. 9.

#### II Problem.

- 1 To match stripes.
- 2 With the woof.
- 3 With the warf.
- 4 On the diagonal.

#### III Method

1 Parallel with warf cut a strip 2" wide.

2 From the larger piece cut a strip parallel with woof 1½" wide.

3. From the corner of large piece measure upward across each 3".

Fold on this line. Crease carefully and cut. (Be careful not to stretch or ravel)

4 Diagonal piece must be in the lower right hand corner when fin-

ished

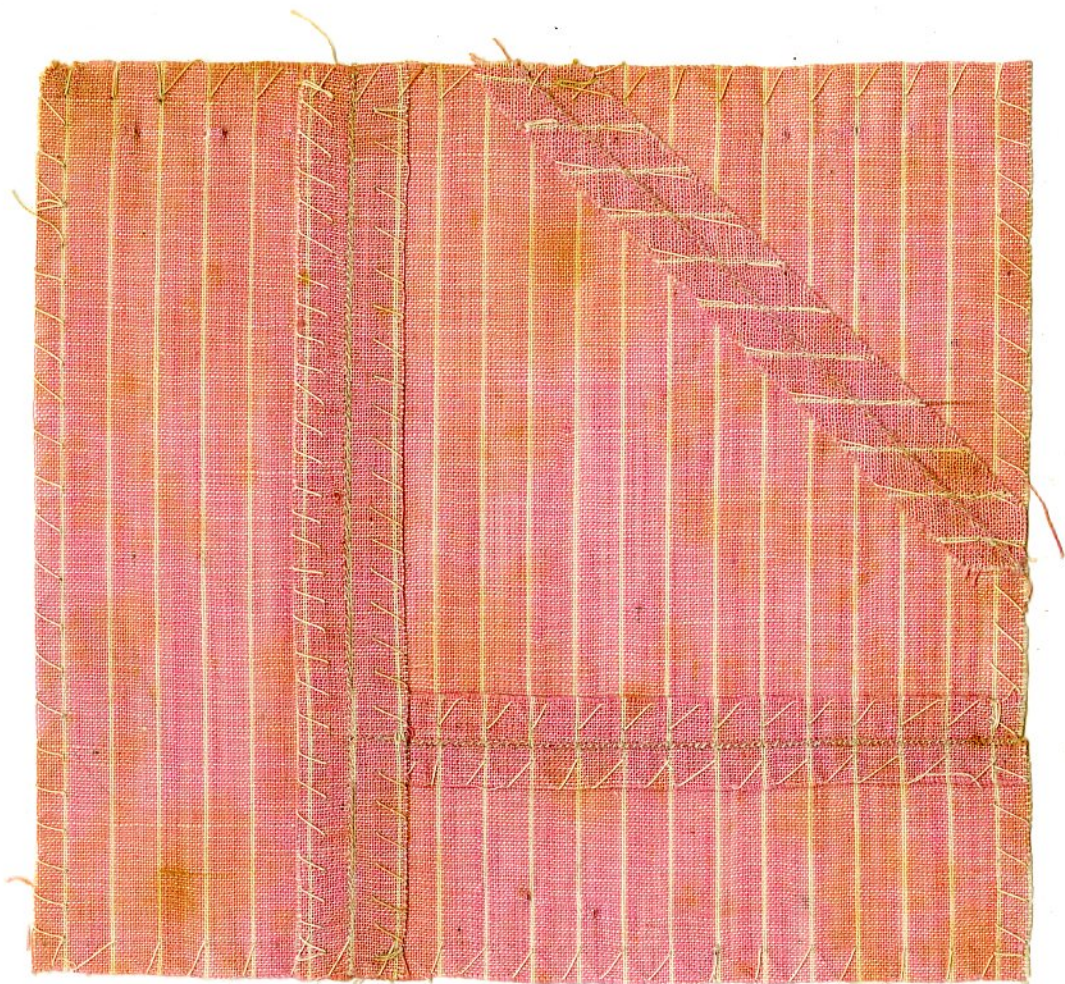
5. Make  $\frac{1}{4}$ " turning on the diagonal sides.
6. Place the right sides together so that the stripe will match, and baste.
7. Overhand
8. Make  $\frac{1}{4}$ " turnings parallel with the woof on both the larger piece and the piece cut parallel with woof. Match stripe, baste and overhand.
9. Make  $\frac{1}{4}$ " turning on larger piece and on strip cut parallel with woof. Match stripes so that the seams will come between a pink and white line.
10. Overcast all seams and outside edges of model.

Note:- Do not hold the work around the finger to overhand. It will full up the side toward you, and the side next to the finger will be drawn tight and keep the stripes from matching.











# Model 9.

## Flannel Patch

### I Material

- 1- White flannel 6x6
- 2- " " 3x3
- 3- Binding ribbon
- 4- White thread No. 80.
- 5- Basting Thread No. 60.
- 6- Needle No. 9.

### II Problem:

- 1- To put on flannel patch.
- 2- Three ways of putting on ribbon binding.

### III To put on patch

- a- Determine warf of each piece
- b- After trimming off patch so there are no broken threads, place center of patch to the center of 6" piece.
- c- Have patch perfectly smooth and baste  $\frac{3}{16}$  of an inch from edge.
- d- Sew the patch to the square with the catch stitch, making stitch  $\frac{1}{8}$ " wide, allowing  $\frac{1}{2}$  of stitch to come over the patch and  $\frac{1}{2}$  on the 6" square.

e- From the 6" square cut out a piece over the patch just as you did in domestic square patch, leaving  $\frac{3}{8}$ " width from where it is sewed on.

Cut as nearly between the threads as possible and catchstitch square to the patch

Method of putting on binding ribbon

a- Fold the ribbon lengthwise in the center. Place over the raw edge of the material.

Put on with the running stitch, catching both sides at the same time then seams can be bound this way

b- Proceed as in a, if the seam is thick the ribbon will be hemmed on each side.

\* c- Fold the ribbon lengthwise just  $\frac{1}{2}$  over. Place over the raw edge so that the edge

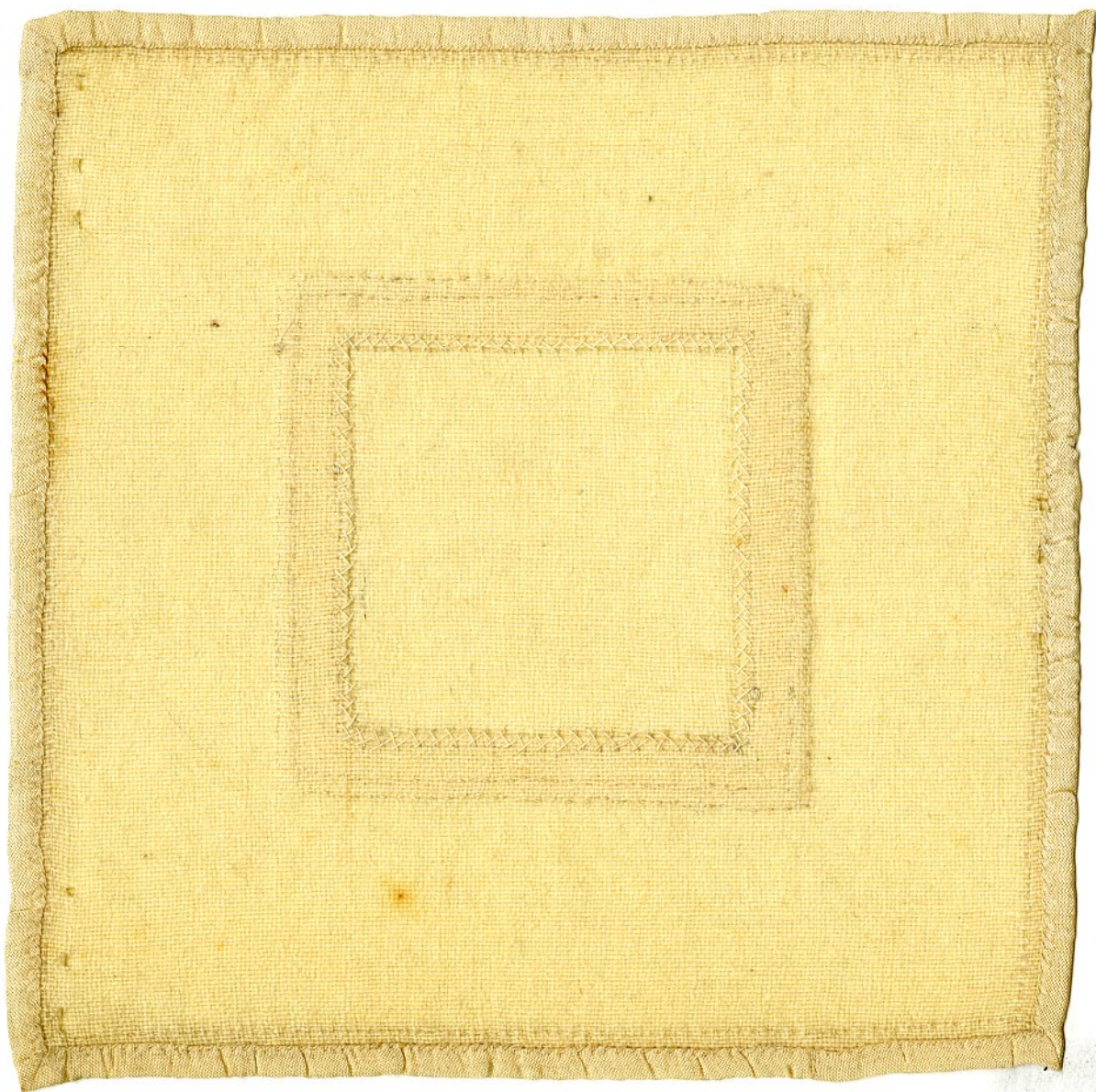


comes to the fold. Narrow side, which is on the right side, is to be hemmed on the other.

Wide side is put down with the running stitch about two threads long.

Note: The binding of flannel is to be put on as in c.

Corners must be turned so the fold will be diagonal.





# Model 10.

## Darn

### I Material

- 1 Square cardboard  $3 \times 3$ .
- 2 Two colors Germantown yarn.
- 3 Rug needle No. 21.

### II Problem:

- 1 To illustrate the principles of weaving and darning.

### III Method:

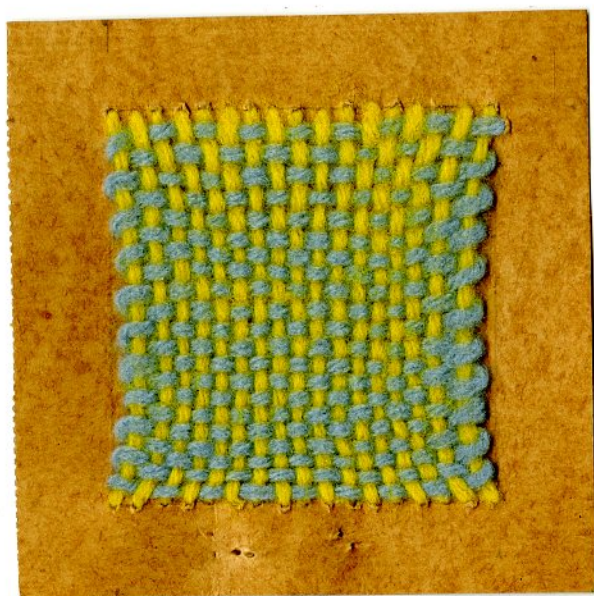
- 1-Make a  $\frac{1}{2}$ " margin all around the cardboard
- 2-On two parallel sides mark every  $\frac{1}{8}$ " from  $\frac{1}{2}$ " margin.
- 3-Puncture these marks with a pin or needle.
- 4-In the upper right hand corner bring the needle from the under to the top side in the first hole.
- 5-Carry the needle down to the opposite hole and put the needle thru to the under side.
- 7-Carry the needle across and up to the opposite hole and continue till all the

holes are filled.

- 8- To fasten thread tie a knot on the under side.
- 9- Take the second color of yarn, hold the warp threads so they run at right angles to you.
- 10- In the upper right hand corner measure down  $\frac{1}{8}$ " from the first hole made and make a pin hole.
- 11- Bring the needle from under to top side in this hole. Pass needle over one thread and under one thread.
- 12- Continue until space is filled.

The woof threads must not be tight, or not tight enough to cause selvage to cut.





## Model 11.

Darn on stockinet:

## I Material

- 1- Stockinet
- 2- Crewel needle No. 6 or 7.
- 3- Hand darning cotton

## II Problem.

- 1 Square darn

## III Method:

- 1- Baste stockinet to cardboard.
- 2- Cut a round hole in center  $\frac{1}{4}$ " in diameter
- 3- Outline a square  $\frac{1}{4}$ " from the sides of the hole.
- 4- Thread needle with two threads of darning cotton.
- 5- Begin in upper left hand corner, holding square with warf threads running up and down, and make running stitches back to opposite edge of outline square, taking care that the upper part of stitch is exactly even with the under part of stitch of the last row.
- 7- Continue in this way until



you reach the hole, then if edge of hole is under the needle in one row it must be over in the next row until all the warp threads are laid, and the outline of square reached.

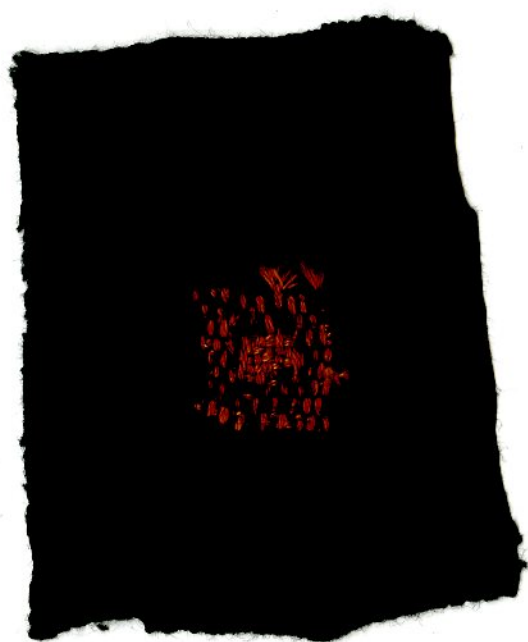
- 8- Turn square so that woof threads are up and down. Begin in upper left hand corner and weave in woof threads as in sample.

Note: Do not tie a knot in darning thread. The threads being interlaced at right angles, it is not necessary.

Diamond darn The diamond darn is made like square darn except the hole is cut in the shape of a diamond, and the outline is also diamond shaped; each corner being  $\frac{1}{2}$ " from corresponding corner of hole.

Instead of beginning to lay the warp and weave the woof threads at corner, begin exactly  $\frac{1}{2}$  way between the corners.

Weave as in square darn. The corners will have stitches only running in one way.





47

## Model 12.

### Plain darn

#### I Material

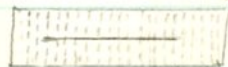
- 1 Plaid woolen material  $6 \times 6$ .
- 2 Warf threads from same to darn with.

#### II Problem.

- 1 To make a straight darn.
- 2 To " " diagonal "
- 3 To " " corner darn with far.

#### III Method

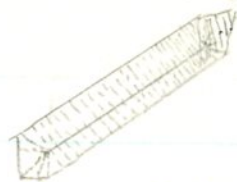
##### 1 Straight darn



- (a) In upper left hand corner 1" down and 1" in mark with a pin.
- (b) From this pin make a cut parallel with woof  $\frac{3}{4}$ " long.
- (c)  $\frac{1}{4}$ " in from each end and each side make an outline as in other darn.
- (d) Choose a color of thread to match, beginning in upper left hand corner of outline.
- (e) Weave in the warf threads and let them show as little as possible.
- (f) Continue until outline has been filled. Only one set of threads

Are put in.

2- diagonal darn.



- (a) In upper right hand corner 1" down and 1" in make a diagonal cut  $\frac{3}{4}$ " long, toward the center
- (b)  $\frac{1}{4}$ " from each side and a little less than  $\frac{1}{2}$ " from each end outline with white thread.
- (c) In upper right hand corner of outline start the threads parallel with warf and fill the outline, choosing different colors of thread whenever necessary.

3. Corner darn.

- (a) In the center at the bottom of 6" square and 1" up, mark with a pin. Make a cut parallel with warf  $\frac{3}{4}$ " long.
- (b) From pin mark or beginning of cut make another cut right angle to first cut or parallel with woof and extending to the right  $\frac{3}{4}$  of an inch.
- (c)  $\frac{1}{4}$ " from the end and around sides of the cut outline with white thread.

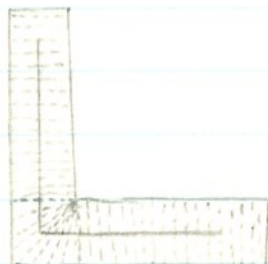


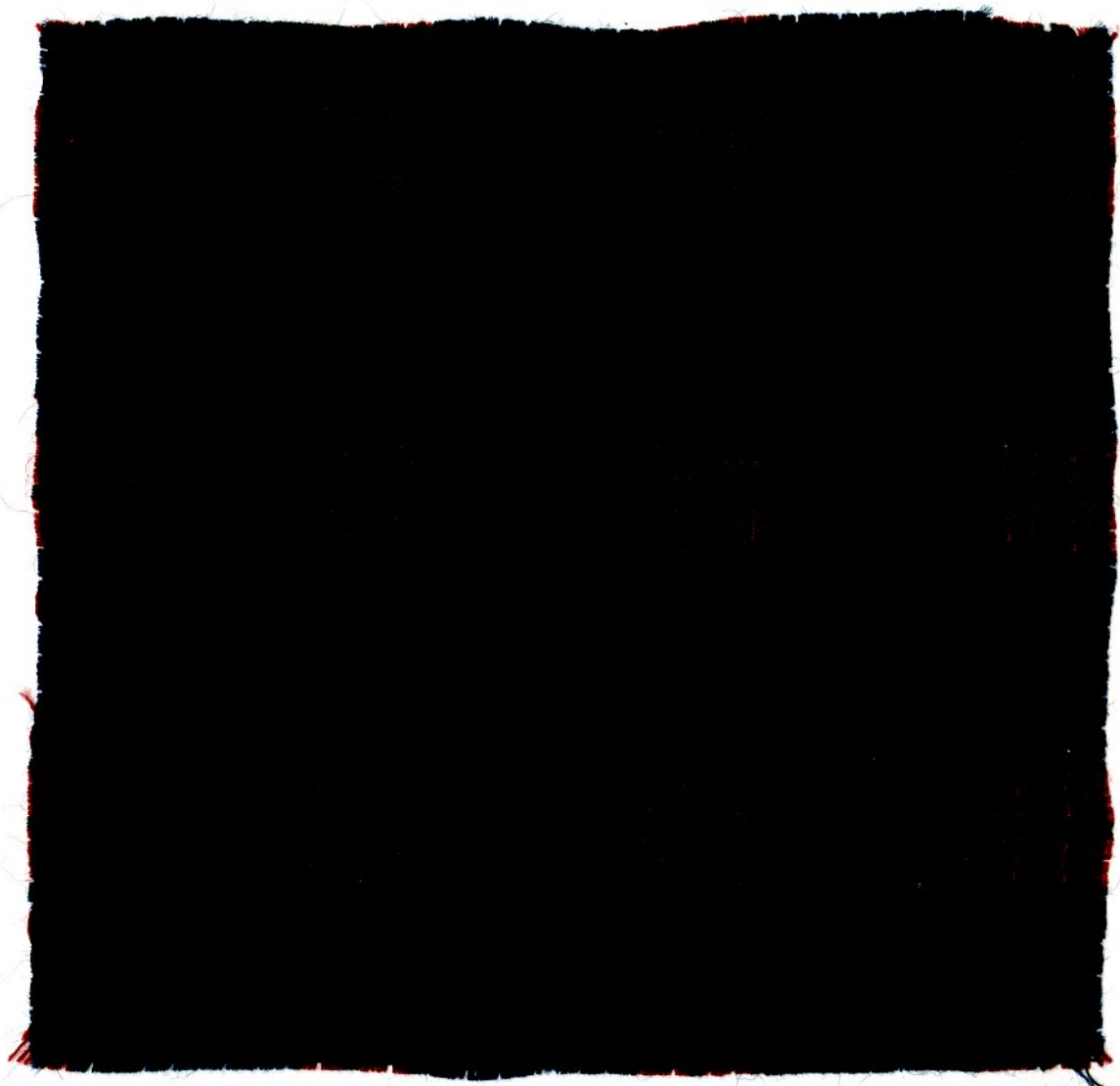
(d) Baste over the cardboard as in other darn.

(e) Start to weave in upper left hand corner. Fill in till you come to the corner of outline. Stop, turn material and darn same as other part

(f) Put in fan corner, starting at the inner corner of outline and weave in threads diagonally farther apart at outside edge.

9 Overcast model.







# Model 13

## Flannel Seams

### I Materials

- 1 White flannel 6 x 12"
- 2 White thread No. 80.
- 3 Binding ribbon

### II Problem

- 1 Plain open seam
- 2 Flat fell seam
- 3 Bound seam
- 4 Plain hem
- 5 Blind hem

### III Method

1 Cut the flannel parallel with warp into four pieces. To make them even draw thread before cutting.

2 The plain open seam.

(a) Place two pieces together, warp with warp and seam  $\frac{1}{4}$ " using combination stitch.

(b) Press seam open on both sides.

(c) Hold edges in place with catch stitch across seam, making three eights inch wide.

3 Flat fell seam.

(a) Place another piece of

flannel on one side of the two already used. Be sure and see that the right sides are together.

- (b) Allow the under piece to extend  $\frac{1}{4}$ " above the other.
- (c) Sew a seam  $\frac{1}{8}$ " wide measuring from side of front piece. Use combination stitch.
- (d) Open seam and press well.
- (e) Turn the  $\frac{3}{8}$ " over the seam and on material. Baste and catch stitch edge of seam to material.

#### 4 Bound Seam.

- (a) The flat fell seam must be in the middle of model.
- (b) Place the fourth strip of flannel to the rest of the model.
- (c) Make a plain seam a trifle less than  $\frac{1}{4}$ " wide. Use combination stitch.
- (d) Press seam open and place ribbon so that the raw edges are concealed. Baste ribbon in place.



(e) Catch stitch binding ribbon to material, making all stitches come on the ribbon.

### 5 Plain Hem.

(a) On one end of model next to plain seam turn a  $\frac{1}{2}$ " hem toward the right side and baste and catch stitch.

### 6 Blind Hem.

(a) On the other end of model make a  $\frac{1}{4}$ " turning, then turn a  $\frac{1}{2}$ " hem. Baste about  $\frac{1}{16}$ " back from the edge. Turn this hem to the wrong side.

(b) Turn model so that hem will be on top side and facing you.

(c) Fasten thread with two small stitches.

(d) Take a small stitch in the hem and then a small stitch in the material.

(e) Continue until model has been crossed.





Both garments  
are neat and splen-  
dibly made. You  
have no details  
unfinished.

C.

## Model 14,

### I Material

- 1 Model 13
- 2 Rug needle 21.
- 3 Blue basting thread
- 4 Clarke's Q.N.T. Luster crochet cotton.

### II Problem.

- 1-To make a chain stitch.
- 2-To make a single feather stitch
- 3-To make a double feather stitch.
- 4 To make a treble feather stitch.
- 5 To make a brier stitch.
- 6 To make a blanket stitch.

### III Method.

#### (c) Chain stitch.

- (a) Chain stitch must be placed over the open seam.
- (b) In making the chain stitch the needle points directly toward you. Make stitches  $\frac{1}{8}$ " long.
- (d) To begin these different kinds of stitches a small knot may be placed in thread.
- (e) Bring the needle from the under to outside as near the edge of model as possible.
- (f) To make a chain stitch.



- (1) Allow the long end of thread to naturally fall in loop on cloth and place the needle thru to the under side in exactly the same spot where you brought it thru to the right side,
  - (2) Take up about 1" of the cloth, allowing the needle to come over the thread forming the loop.
  - (3) Draw the loop thru, but do not draw the loop in the chain until tight.
  - (4) To make the second stitch place the needle on the inside of the last loop made in the same place, where the needle came out. Take up  $\frac{1}{8}$ " of cloth and make the loop as before.
  - (5) Continue until the seam is finished.
2. Single feather stitch,  
a Divide equally a space between the open and flat fell seam and put in a

blue basting thread. (The guide line)

(b) On the left side of the guide line and about  $\frac{3}{16}$ " from it bring the needle from underside of model.

(c) Carry the needle diagonally across line and about  $\frac{1}{8}$ " from it take up a small quantity of the material, placing the needle at right angle with this diagonal thread. When the needle is on the right side of guide line the long thread comes around the point of the needle from left to right. Draw the thread not tight enough to pucker.

(d) Carry the thread diagonally across the guide line and continue as before. All threads are at right angles to each other

3 Double Feather Stitch.

Divide equally the space between the flat fell seam and bound seam and put in guide line.





- (b) Begin and make the first stitch exactly as for single feather stitch.
- (c) Parallel with the stitch first taken up in the material and a small distance from it take up another stitch of the same size.

d Carry the thread diagonally across guide line and continue

#### 4 - Treble Feather Stitch.

- (a) Make this stitch over the flat fell seam
- (b) Make it exactly like the double feather stitch only add another stitch and continue across piece.

#### 5 - Briar Stitching.

- (a) The bound seam itself will serve as a guide line.
- (b) Make stitch about same size as the single feather stitch. This time needle is placed parallel with guide line.



## 6 Blanket Stitch.

(a) Blanket stitch is from left to right.



(b) Across one side of flannel model make a row of blue basting  $\frac{1}{4}$ " from edge. Place knot in threads.

(c) Bring the needle from the under to right side in the hem near the edge on left side and even with basting thread.

(d) The first stitch is much like a chain stitch. Have the long thread on the left of the needle. Place needle in the cloth line in the guide line and about  $\frac{1}{6}$ " from place where thread came up for first time.<sup>(e)</sup> The needle passes under  $\frac{1}{4}$ " of material and must come up in the loop formed by the long thread.

(f) Continue until this side is filled.

7 On the other side of model make an original design of blanket stitch







## Model 15

## Buttonholes

## I Material

- 1 Domestic  $6 \times 2\frac{3}{4}$ "
- 2 "  $3 \times 2\frac{3}{4}$ "
- 3 White thread No. 80.
- 4 Needle No. 9.

## II Problem.

- 1 To make a stranded buttonhole
- 2 " " " " and overcast B. H.
- 3 " " " " " worked B. H.  
with fanned ends.
- 4 To make a overcasted and  
worked buttonhole with fan-  
ned ends.
- 5 To make an overcast and  
worked buttonhole with fanned  
end next to fold and a  
bar at the opposite end.
- 6 To make an overcast buttonhole  
with bar at both ends.
- 7 Make like No. 6.

## III Method

- 1 Stranded buttonhole
- (a) Fold the material length-  
wise and bast across the  
ends and across the cut



side

- (b) Usually buttonholes are made in the center of a hem or lap.
- (c) Make a  $\frac{1}{2}$ " buttonhole by setting the scissors for that size.
- (d) Cut as nearly with the threads as possible.
- (e) Fasten the threads on the underside of the buttonhole at the opposite end from the fold.
- (f) Bring the needle to the right side about  $\frac{1}{16}$ " below the cut and  $\frac{1}{16}$ " from the end of the buttonhole.
- (g) Carry the needle across one side of buttonhole to the opposite about  $\frac{1}{16}$ " beyond the end. Put it thru the cloth and take up small running stitch across the end of the hole and about  $\frac{1}{16}$ " from the left side. Carry the needle back to the opposite edge of hole and make a

$\frac{1}{2}$  running stitch to the beginning

2. A Stranded and overcast buttonhole.

- (a) Strand buttonhole same as in one.
- (b) The overcasting thread should come just below the stranded thread.
- (c) Hold the cut edges of buttonhole exactly even when overcasting.
- (d) The number of overcasting stitches depends altogether on the size of buttonhole and the kind of material.
- (e) The last overcasting stitch on either side must be exactly even with the end of the hole.
- (f) Place the needle thru the cut exactly at the end of buttonhole, allowing it to come out on the opposite side just below the stranded threads.
- (g) Overcast other side same as first.

3-- A Stranded and worked buttonhole with fanned ends.

- (a) Strand as in one.



- (b) Place needle in the end of the hole, allowing it to come out just below the stranded thread.
- (c) Pick up the double thread near the eye of the needle and bring from left to right around the point of the needle.
- (d) Pull the needle thru the cloth, drawing it from you.
- (e) Continue to the corner.
- (f) Measure the length of the stitch that is to go at end of buttonhole longer than side stitches
- (g) Divide this  $90^\circ$  angle in the center and measure the length of stitch between length of side stitches and end stitch.
- (h) Make three stitches in the fan, then continue up the side.
- (i) Make other side same as this.

4 Overcast and worked buttonhole with fanned end next to fold

63

and a bar at opposite end.

(a) Proceed as in 4 to the second end.

(b) Place the thread across the end and take up these threads instead of the cloth, Catch the cloth at each end and in center.

6-- To make an overcast button hole with bar at both ends. Proceed as in 5 only make ends barred.

7-- Same as 6.

8-- Overcast model.

Note: First two buttonholes will be worked on short piece of material.

Next five on the long piece.





# Model 16

## I Material

- 1 Woolen material  $5 \times 3$ ,
- 2 Lining  $5 \times 1\frac{1}{2}$ "
- 3 Buttonhole twist (black)
- 4 Blk & white thread No. 80
- 5 Hook, eye and button.

## II Problem

- 1 To make a  $\frac{1}{2}$ " buttonhole with a fan end and a bar end.
- 2 To make a buttonhole with both ends barred.
- 3 To sew on a button.  
To sew on a hook and eye.

## III Method:

- 1 To make a  $\frac{1}{2}$ " buttonhole with a fan end and a bar end
  - (a) Cut the hole  $\frac{1}{2}$ " long and overcast with plain, black cotton thread No. 80.
  - (b) Make the buttonhole just as you did in domestic.
- 2 To make a  $\frac{1}{2}$ " buttonhole with both ends barred.
  - (a) Proceed as in one.
  - (b) Both ends are barred.



### 3.. To sew on a button

- (a) Locate place for button and fasten thread on top side with two small stitches, using a single thread.
- (b) Bring needle thru eye of button from under to top side.
- (c) Place button exactly over fastening of thread.
- (d) Put the needle thru the 2nd eye of the button and thru to the underside of cloth.
- (e) Before drawing thread tightly slip a pin under the thread, making the pin come between the button and the thread that goes on top of the button.
- (f) Continue to sew back and forth, up thru one eye and down thru the other; each time the thread passing over the pin. (7 or 8 times)

- (g) The last time the needle must be put thru to the wrong side.
- (h) Bring needle to the right side of cloth directly under the button.
- (i) Remove the pin and pull the button until the threads are tight.
- (j) Wind the thread in the needle around the space between the button and the cloth, thus forming the neck.
- (k) Carry the needle thru to the wrong side and fasten with two small stitches.
- 4-- To sew on hook and eye.
- (a) To sew on eye.
- 1- Locate the place for the eye.
  - 2- Hold the eye so that the two loops are next to you.
  - 3- Fasten thread on top side so it will not show.
  - 4- Sew around this loop using the blanket stitch and making a purl to come on



the outside of the loop.

Continue until loop is full.

5--Carry it across to the other loop and fill in the same way.

(b) To sew on a hook:

1 Locate the place and fasten thread - sew around thru the loop as in the eye.

2 Without breaking thread carry it to end of hook between thickness of cloth

3 Sew around the end of the hook 3 or 4 times so as to hold it in place. Fasten the thread with two small stitches.

4 If you use silk thread put the needle thru the cloth  $\frac{1}{2}$ " or more, then clip thread.

Overcast model along cut ends and side with black thread.





# Model 17. Plackets

## I Material

- 1 Domestic  $4 \times 3\frac{1}{2}"$
- 2 "  $4 \times 3\frac{1}{2}"$
- 3 "  $6 \times$
- 4 White thread 80 or 90.
- 5 Needle No. 9 or 10.

## II Problem:

- 1 To make a lapped placket.
- 2 To make an extended placket.

## III Method:

### 1 Lapped placket:

- (a) Parallel with warp in one of pieces  $4 \times 3\frac{1}{2}"$  make a cut exactly  $2\frac{1}{2}"$  long after having divided the piece into  $\frac{1}{3}$ s.
- (b) On the  $\frac{1}{3}$  division make a hem about  $\frac{1}{8}"$  wide and taper to almost nothing at base.
- (c) On a  $\frac{2}{3}$  division make as narrow turning as possible  $\frac{1}{8}"$  or less and taper to base.
- (d) Turn a  $\frac{1}{2}"$  hem and baste.
- (e) Hem both hems to placket base.

- (f) Fold the  $\frac{1}{2}$ " hem over on the other and sew across the base with a back stitch.

Note: Use for children's underclothes.

## 2-- Extended Placket.

- (a) In the center of the other  $4 \times 3\frac{1}{2}$ " piece parallel with warp, cut exactly  $2\frac{1}{2}$ " down.
- (b) Place the right side of material to the right side of long strip, holding the garment next to you.
- (c) Beginning at the end of the strip baste the material to it, making a seam about  $\frac{1}{8}$ " wide and gradually tapering to almost nothing at the base.
- (d) Pick up the other side of placket and lay on the strip. Taper the seam out to correspond to the



one on the other side.

(e) Sew material to strip with combination stitch.

Remove basting.

(f) Take opposite edge of the strip and make  $\frac{1}{8}$ " turning across.

(g) Open out the strip from material, allowing the seam to turn over on the strip.

(h) Turn strip over this seam until it just covers the combination stitching and baste to the base of placket hem.

(i) Continue to turn the strip over the seam on the opposite side and crease firmly.

(j)  $\frac{1}{4}$ " to the left of placket base make a cut across the strip to  $\frac{1}{8}$ " of the crease in the strip. Then cut along that line parallel with the crease just formed.

(k) Turn this facing over on the material, baste and hem from the base of placket to top

(l) Back stitch across placket base. Stitching to show on right side.  
overcast model.





# Model 18

## Combination of Embroidery

### I Material

- 1 Long cloth 6x4"
- 2 " " 6x2½"
- 3 Swiss Beading 4"
- 4 " insertion 4"
- 5 " edging 6"
- 6 Thread No. 100
- 7 Needle, very fine

### II Problem:

- 1 To hem and place a ruffle in a split hem.
- 2 To place Swiss beading to long cloth with flat fell seam.
- 3 To sew Swiss edging with a bound seam.
- 4 To place insertion in long cloth with lapped seam.

### III Method:

- 1 To hem and place ruffle in split hem.
  - a - Across one end of long cloth 6x4" turn and make a hem 1" wide.
  - b - Across long side of long cloth 6x2½" turn and make

a  $\frac{1}{2}$ " hem. Split the 1" hem in long cloth exactly in the crease.

c Gather the long cloth ruffle. Place the right side of ruffle to the right side of split hem. Adjust gathers, baste and sew with back stitch.

d Open ruffle out from the hem, make a narrow turning on wrong side of split hem, turn over the gathers just to hide the back stitching, baste and hem.

2 To place Swiss beading to long cloth with flat fell seam.

a Place right side of beading to right side of long cloth, allowing about  $\frac{1}{4}$ " of beading to extend above the edge of long cloth.

b Turn the materials so as to hold beading toward you. Sew the beading to long cloth with combination stitch. (right next to cord on beading)

c. Open the two pieces of material, trim any extra material from the edge of beading, make



- a narrow turning, turn over on the long cloth, baste and hem.
3. To sew Swiss edging and beading to bound Seam.
- a. Trim and gather the embroidery ruffle, place the right side of ruffle to the right side of beading, making gathered thread come exactly next to the cord, Baste and sew with back stitch.
- b Allow for enough to cover seam and make the turning about  $\frac{3}{4}$ ".
- c Turn beading material over the seam to just cover the back stitching, baste and hem.
- 4 To place insertion in long cloth with lapped seam
- a Fold the long cloth in center and cut in two,
- b Insertion is to be put in with lapped seam.
- c Make a turning on long cloth to wrong side, slightly less than  $\frac{1}{8}$ ".
- d Allow for the width of the seam on the insertion. (Lapped seams are stitched like flat fells, but stitched on both sides)

- e Trim any extra after allowing for the turning.
- f Place long cloth over this so that the fold comes just to the cord. Baste and hem on both sides.
- g. Sew the other side of the insertion in exactly the same way.

Quercast model.





## Model 19.

## Stitched Seams.

## I Material

- 1 Domestic 6x12"
- 2 White thread No. 80
3. Basting thread

## II Problem:

## 1 To make by machine:

- 1 A plain seam.
- 2 " flatfell "
- 3 " french " "
- 4 " lapped " "
- 5 " bound " "

## III Method:

## 1 Plain seam

- a See previous directions.
- b Stitched seam about  $\frac{1}{4}$ " wide.
- c Overcast both together.

## 2 Flat fell seam.

- a See directions under Model 18.
- b. Have the seam no more than  $\frac{1}{4}$ " wide from the shorter edge (less will be prettier)

## 3 French seam

- a Place wrong sides together and stitch near the edge.
- b After <sup>stitching</sup> ~~trimming~~ trim as



near the stitching as possible, leaving about  $\frac{1}{6}$ " or less.

- c Turn the right sides together, face and stitch a seam  $\frac{1}{8}$ " wide. (This will leave the raw seam within the second stitching.

#### 4 Lapped Seam

- a See model 18 for directions.  
b Make seam about  $\frac{3}{16}$ " wide.  
c Stitch as nearly on the edge as possible.

#### 5 Bound Seam;

- a See model 18 for directions.  
b Instead of hemming by hand baste and stitch on the machine.

Note: <sup>(a)</sup> Divide the material in the center in the short way and cut.

b Divide each piece again into  $\frac{1}{3}$ s and cut.

c After all seams are made overcast the model.

Notes &  
Models &







Domestic Art.<sup>2</sup>

## Contents of Work Box,

1. Scissors
2. Thimble
3. Pins and needles
4. Woolen cushion
5. Little wooden box for pins
6. Tracing wheel.
7. Tape
8. Red pencil for patterns.
9. Piece of elastic 27".
10. Blue or tan thread for basting.

## How to take measures.

(corset cover and princess slip)

- 1 Length of back—from base of neck to waist line.
- 2 Width of back—across shoulders, about 3 inches below base of neck, or across the widest part of the back.
- 3 Under Arm—Put the tape over a pencil and place the pencil under the arm (well up)—Adjust the tape until you have the measure from the bottom of the elastic, then read on top of pencil.
- 4 Waist measure (close measure)
- 5 Bust measure—Pass tape around fullest part of the bust, close up under the arms and well up in the back. (stand at the back when taking this measure.)
- 6 Length of front—From base of neck in front to bottom of elastic.
- 7 Chest—A corresponding measure to width of back—measuring from shoulder to shoulder about three inches below base of neck.



8 Neck measure: Place tape around base of neck and take a comfortable measure.

9 Armseye: Pass tape around arm and take a comfortable measure, letting it come right up to point of shoulder.

### Skirt

1 Length of front: Measure from top of elastic to floor. Let tape fall in a straight line.

2 Length of side: Measure same as front, measuring both hips.

3 Length of back:

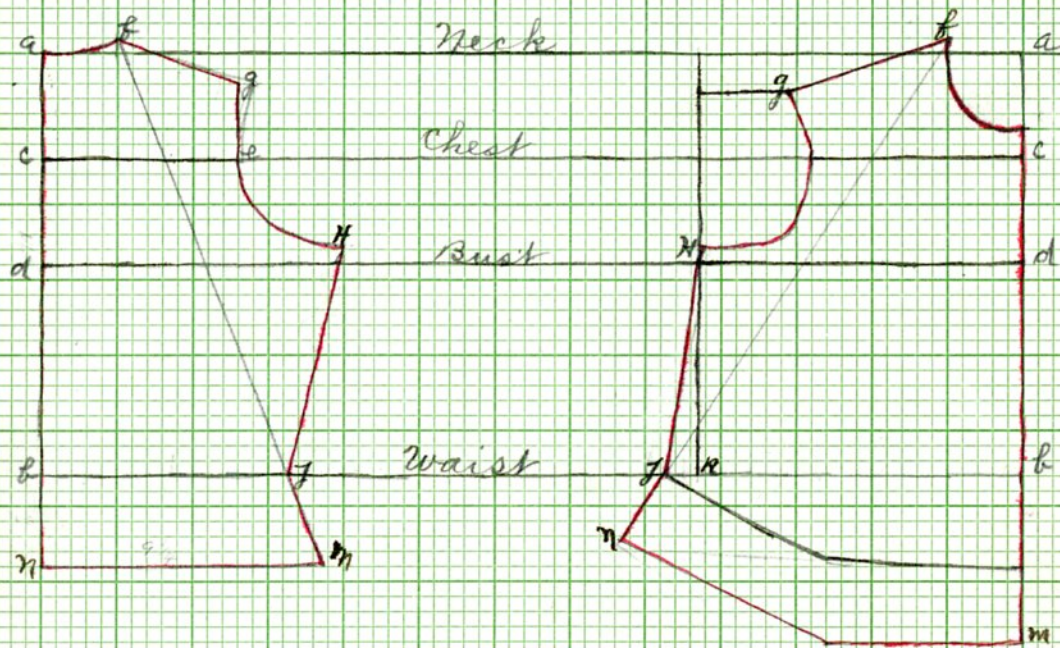
4 Hips  $4\frac{1}{2}$  and 9" below waistline.

Measure down required distance at right angles to tape measure. Pass tape around body close to these points, taking a loose measure.



# Plain Waist

91



## Measurements

Length of back	14"
Width " "	14 1/2
Underarm	7 1/2
Armseye	15 1/2
Chest	14
Neck	13 1/2
Bust	38
Waist	28
Length of front	15



## Drafting Patterns

Directions for plain Waist.

### Back:

1 Draw a. b. equal to back length and divide into  $\frac{1}{4}$ s, making c. and d.

2 From points a. c. d and b draw lines at right angles to a b, designate as neck, chest, bust and waist lines.

On chest line from c measure width of back and divide into  $\frac{1}{3}$ s, mark e.

The  $\frac{1}{3}$  of back is used 3 times.

1st: To determine width of neck.

2nd: Height of shoulder.

3rd: Place for underarm seam.

4th Width of back panel in princess S.

Determine width of neck, height of shoulders, and draw a line from this point thru e to bust line, Then determine place for underarm seam.

Raise neck  $\frac{1}{2}$ ", extend shoulder  $\frac{1}{2}$ " and mark f and g.

Draw back neck curve from a to f.

Connect f. and g with a straight line.

In the waistline from b, measure  $\frac{1}{4}$  of waist measure +  $1\frac{1}{4}$ " mark f.

From f. apply underarm measure up to above or below bust line, Draw back armseye curve from f thru e.

For peplum place yardstick from a to f. Draw dotted line, then continue line from f. 3" below, Measure down from b 3" and join points m & n.

### Front

Determine how much of bust measure has been used in the back. Deduct this from  $\frac{1}{2}$  bust measure and add  $1\frac{1}{2}$  or 2" for fulness. Apply this measure on bust line for width of front.

Draw line from neck to waistline thru this point. Divide the upper  $\frac{1}{4}$  into  $\frac{1}{3}$ s and draw a line parallel to neck line after designating the upper  $\frac{1}{3}$ .



Draw this line to the right about 5 or 6 inches.

Measure down and to the left of a  $\frac{1}{3}$  of  $\frac{1}{2}$  of neck +  $\frac{3}{8}$ ".  
Raise neck  $\frac{1}{2}$ " = point f.

Apply f. g. of the back from f. to meet the shoulder line.

On the chest line measure width of chest = e.

Measure to left of R.  $1\frac{1}{4}$ " and mark f.

Apply underarm measure up to bust line above or below.

Draw front neck curve = S.

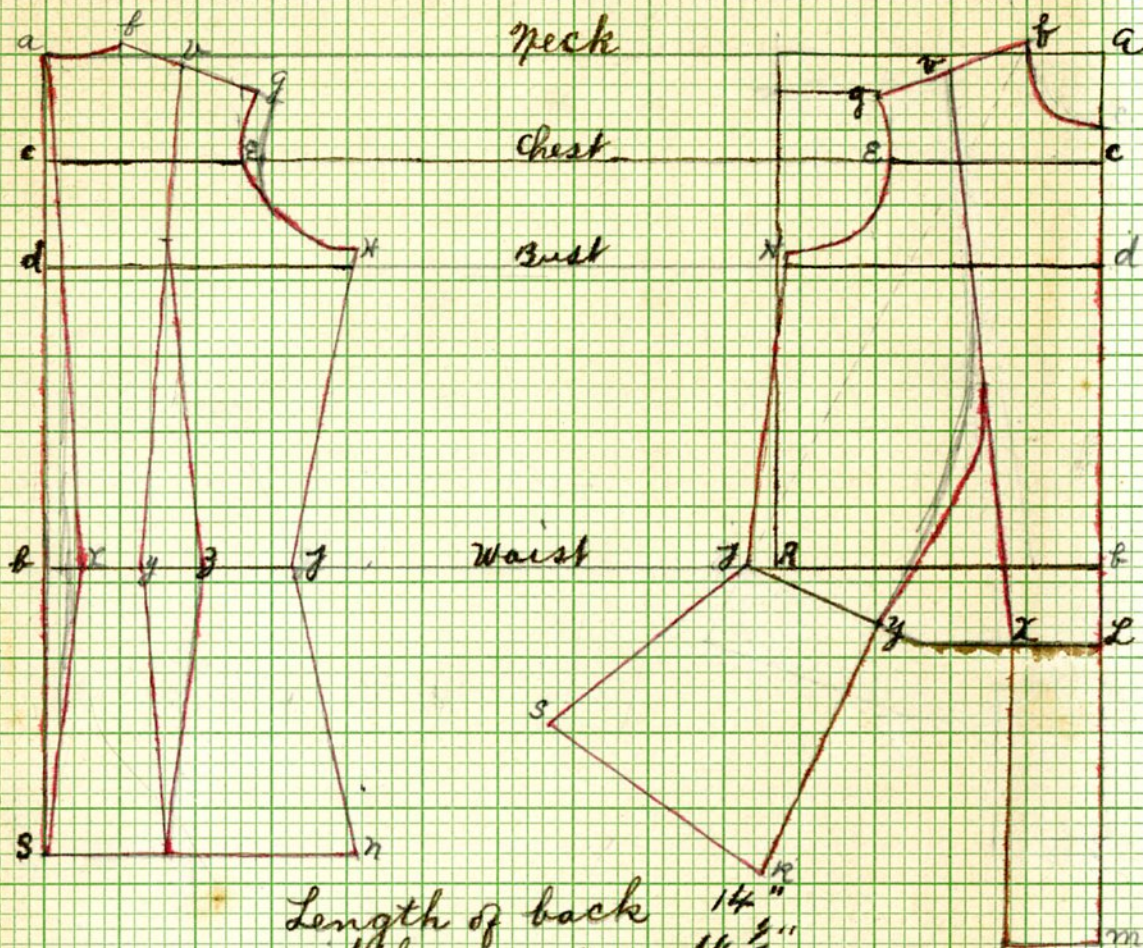
" " armseye "

Measure down from S front length.

For peplum place yardstick from a. to f. and draw a dotted line. Then a continued line from f. in same direction.



# Princess Slip.





## Directions for Drafting a Princess Slip.

Draft or trace a  
plain waist pattern omitting  
the peplum.

Back,

Measure in from b.  $\frac{3}{4}$  of  
an inch = x

From X  $\frac{1}{2}$  width of back = y.

From y  $1\frac{1}{4}$ " = z.

Find  $\frac{1}{2}$  of F.G. = v.

Draw straight line from  
a to x.

Draw a straight line from  
v to y.

Draw line from z for the  
dart, letting it come below,  
up to, or above the bust line,  
as the case may be.

If front is longer than back  
this dart goes above bust line.

If shorter it falls below.

If the same it falls on the line

Measure down from b nine  
inches and to the right of M.  
distance for side seam.

Measure down from J.  
nine inches and let the  
line intersect the last meas-  
urement = point N.

Connect points with straight  
lines.

Measure on M. N. 4,  $4\frac{1}{2}$  "  
or  $\frac{1}{2}$  the distance.

Draw lines from Y to J  
to this point.

To find balance point.  
 $\frac{1}{4}$  of waist -  $\frac{3}{4}$ " from back,  
or from center front  $\frac{1}{4}$   
waist +  $\frac{3}{4}$ " from center front,  
for looseness,

Front of Princess Slip.

Determine width of  
front panel at the waistline.

Find  $\frac{1}{2}$  of F. G.

Draw a straight, dotted  
line from V to X.

Measure to the right of  
J or on the waistline, the  
remaining waist measure.

below 25 2 1/2  
25 1 30 = 3



The front dart is  $\frac{1}{2}$  length of front +  $\frac{1}{2}$ " measuring down from neck.

Draw a line from A. B. 1/2 point to V, X, and mark intersection with V X = O.

O. X. and O. Y. must be equal.

### Below Waistline.

Measure down from L nine inches = point m.

Determine width of side front 9" below waistline. Same as waistline.

Width of dart 9" below waistline =  $1\frac{1}{2}$  times width of dart at waist.

Measure down from Y 9" and designate width of dart.

Measure down from J 9" and determine width of side front. 9" below waist same as that waist line.

Draw S. R, Y R, and J. S.  
Soften all angles into curves,  
Making the hip curve and the curve over bust according to the figure.

Make connection points

## Part II

### Cutting and Making.

#### I Materials:

Wainsook

Bleached Domestic

Berkely Cambric.

Flaxon, white Sateen

General Cambric

#### II Preparation of material.

- 1 Stretch material so warf and woof threads will run at right angles.
- 2 Tear or cut across the ends if it is cut unevenly from the bolt.

#### III Testing Patterns

Pin pattern together and hold to figure to insure its being long and broad enough. Better too long than too short.

A trial garment may be made. If alteration is necessary make it on the garment then on the pattern.



#### IV Placing pattern on the material.

1 Place pattern to use goods economically.

a Fold goods lengthwise <sup>or</sup> according to width of goods and style of garment to be made.

b Put larger end of pattern on torn end of material.

2 Place center front and center back with warf of goods.

For corset cover.

a For garment opening in front:  
Lay back pattern on lengthwise fold of material; folding it over only far enough to accommodate pattern.

Allow for fulness if desired in tucks or gathers.

Lay front pattern on cloth double so as to cut both at once. Allow for fulness if desired, and also for hem or box pleat and lap.

b. For garment opening in back,  
Lay front pattern on lengthwise fold of goods, allowing for fulness.  
Lay back pattern on cloth double

so as to cut both pieces at once. Allow for fulness, hem and lap.

C. For slipover garment

Lay center front and back on lengthwise fold

2. Allow for fulness in front, but no lapping.

d. Replum.

Lay center back on lengthwise fold and allow for hems in front.

Directions for cutting a Princess slip.

Use material at least 36" wide. Fold the edges together all along the way.

Use one length for front panel and side front. The other length for back panel and side back.

For garments opening in back.

Place center front on fold of material. Extend the lines to the desired length of slip, using yard stick and skirt



measures. So adjust the side front on the material that the desired length and width of garment may be secured.

Place back panel on lengthwise fold of material allowing for seam only.

Cut same as front, placing side back in same manner but slitting the back panel 9" below the waistline.

For garments opening at side front.

Cut same as garment opening in back, omitting the seam allowance and placket.

Allow  $\frac{1}{2}$ " on seams if no allowance is made on pattern.

## V Cutting

1 Pin pattern securely, being careful not to pucker either pattern or material.

Trace all seams and connection points.

Cut with long even strokes.

## VI Seams

### Basting

1 Baste or pin all seams, joining connection points carefully and basting or pinning evenly and carefully, letting any unevenness come out at the bottom.

If pins are used, place at right angles to seam

### 2 Kinds of seams

a French seam for princess slip (must be narrow and dainty)

b Flat-fell for corset cover. Fell toward the front.

## VII Closing

Corset cover, front or back.

Hem from  $\frac{3}{4}$  to 1" wide on both sides.

Hem on right front may be turned on the right side and stitched on each edge to imitate a box pleat.

Princess slip = Back,

Use extension placket, hav-



ing it from  $\frac{3}{4}$  to 1" wide when finished.

Side Front closing.

Use a bias binding on the under side and a bias facing on the top side.

Buttonholes should be worked in a separate piece cut lengthwise of the material and sewed on. In all cases cut off the selvages.

### VIII Finish of neck

- 1 Fitted top
- a Gathered

- 1 Gathered top beginning where the neck begins to curve and draw up to fit the figure.

#### (2) Finishes

(a) Bias facing on wrong side stitched down on to gathers one time, a second time at same depth as width of facing gives.

(b) Bias facing on right side to be decorated with feather stitching.

(c) Bias binding

(d) Yoke

Fit yoke to figure and

and adjust gathers to bottom of yoke.

(1) Finish for bottom of yoke.

(a) Seam on right side covered with bias or finishing braid.

(b) Seam on wrong side faced with bias.

2 Finish for top of yoke.

(a) See suggestions under three, below full or gathered top.

Fulness may be taken up in tucks forming the yoke effect.

(1) Fitted Top.

(2) Semi fitted top.

(a) Top gathered slightly into a binding, then edged with beading so as to be drawn up with a tape

(3) Full or gathered top.

(a) Narrow hem by hand.

(b) Edge turned to right side and covered with bias tape, finishing braid or embroidered beading.

(c) Faced on wrong side with bias binding

(d) Edge rolled and beading for insertion sewed on.



Any of the above edged with lace or embroidery insertion and edging. If embroidery is used put on with a lapped seam.

IX Finish your armseye similar to full or gathered top.

X Decoration for front:

1. Hand embroidery.
2. Feather stitching.
3. Faggotting
4. Insertions of lace or embroidery.  
This to be overhanded in or set in with lapped seams.

XI Finish of bottom;

Band to be cut lengthwise of goods twice the desired width of band, allowing for seams, and cut as long as waist measure (loose) allowing for seams, shrinkage and lap.

2 - Peplum:

a - Sewed to gathered bottom of waist and faced on wrong side, letting facing extend on to peplum.

b - Same as "a" except faced on right side.

c- Inserted between the two edges of band which is split along the fold, sewed to outer side and seam covered by inner side of band.

3- a. Bottom hemmed with narrow hem.

Tape or band attached in back at waistline to confine the gathers.

b- Casings made at waistline by stitching on a strip.

Thru this the tape is run.

c- Beading sewed at waistline for ribbon or tape.

4- Join to drawers making a combination suit.

(a) Narrow band.

(b) Embroidered beading or insertion.







## Directions for drafting skirt

1- Draw a b equal to hip measure +  $1\frac{1}{2}$  in.

2- Measure down from "a"  $\frac{1}{10}$  width of bottom, and in from b  $\frac{1}{8}$  width of bottom.

3- Find  $\frac{1}{2}$  of a. d. and draw a perpendicular to this point.

4- From c draw a line parallel with a. b. to meet the perpendicular.

5- Measure down from c length of front = point f.

6- Measure up on perpendicular the difference in front and side measure = point e.

7- Raise or lower d according to difference in side and back measure. If back is shorter than side lower d this difference. If back is longer than side raise d this difference. If back and side are equal leave d where it is.

8- Draw waist curve point c. d.

9- From f describe an arc



of a circle with a radius equal to width of skirt.

10- From d describe an arc of a circle with a radius equal to back length. Point of intersection = g.

11- Draw a dotted line from d to g.

12- Draw a straight dotted line from f to g.

13- Find  $\frac{1}{2}$  of f.g. = point m.

14- Apply side measure <sup>thru</sup> down ~~front from~~ e to m. Draw a straight dotted line.

15- Draw bottom curve.

16- Measure down from c 9" = point n.

17- Find distance n.f. apply this measure on side and back line up from bottom. This equals hip line. Back of hip line = point o.

18- Test hip line. If too small extend o, and connect with g and d.

19- Determine type of skirt to be made.

20 - Determine excess of waist line over waist measure.

Remove fulness as seems best. Allow for all seams.

Add  $1\frac{1}{2}$ " to hip line at 0 if after this line is tested it is longer than the hip measure +  $1\frac{1}{2}$ ".

Measurements Oct. 1915.

Hip  $4\frac{1}{2}$ " down = 37"

Hip 9" " = 40"

Waist = 28"

Front =  $40\frac{1}{2}$ "

Side = 42"

Back = 42"

Width = 2 yds.



## Directions for making undershirt

### I Materials

Same as for corset cover or princess slip. In addition may use lawn, gingham or sateen.

### II Placing pattern on goods and cutting.

1 Place center front on lengthwise fold, folding goods over just far enough to accommodate pattern. Place bottom of pattern to cut end of goods.

2 Lay straight side of gores and back on lengthwise of the goods, slipping the narrow end of one in beside the wide end of the other; thus economizing cloth. If convenient, fold the goods end to end or fold the goods in the middle lengthwise and cut both gores at once.

3 Trace all seams and the line representing the edge of the inverted pleat at the back, if there is one.

4 Make connection points to correspond with corresponding gores.

### III Seams.

#### 1 Basting

Baste seams holding gores with connection points together, thus always bringing a straight and bias piece together. Hold bias side toward you if possible.

Pin seams together, letting any unevenness come out at the bottom. Baste pleat in place at back leaving back seam open till after fitting.

(a) For french seams baste up seam on outside of skirt.

(b) For other seams baste on wrong side.

#### 2 Fitting

Pin skirt on figure, pinning center of front in place.

Take up at pleat on hip if necessary.

#### Retrace Seams

#### 3 Stitch on tracings.



#### 4 Kinds of seams

(a) Plain  $\frac{1}{4}$ " seams overcast.

(b) French

(c) Flat fell.

Trim off bias edge of each seam and use straight edge for fell. Fell back seam over on the right back, thus making it convenient for placket to lap.

#### IV Placket

1 Use bound or extension placket.

2 Hem placket may be used on thin slips or slips of dainty material.

3 Make placket from 9 to 10" long.

#### V Finish at top.

1 Pin tape or band around the natural waistline. Put on skirt and pin to tape at close intervals, making skirt fit well at waist and hips.

2 Back may be habit, inverted pleat or gathered.

3 Finish with band or facing.

## VI Facings

1 Buttonhole and button.

2 Tape for tying.

(a) Run in all around.

(b) Fasten at points 4 or 5" from back to draw up back only.

## VII Hanging.

1 Must be done after top is entirely finished.

2 Most convenient for person to stand on table or platform.

3 The distance from the floor must be gotten by measuring upon the skirt as it hangs naturally.

4 Avoid drawing skirt in close to the back.

(a) Measuring may be done by piece of cardboard, ruler or patent skirt hanger.

(b) Another method particularly good for finding the line for the top of a flounce when the skirt does not extend below, is to take



the yardstick and mark the points equally distant from the floor all around the skirt. This may be an exact line for flounce or it may be any line below the hips from which equally distant lines may be measured to mark line for flounce, tucks or bottom of skirt. These points should be joined with a good curve.

#### VIII Finish at bottom.

- 1 Hem from  $\frac{1}{2}$  to 3" wide.
- 2 Dust ruffle 1 3 or 4" wide with narrow hem edged with narrow lace and full  $1\frac{1}{2}$  times the bottom of skirt.
- 3 Flounce  
a Material
  - (1) Embroidery
  - (2) Dotted swiss
  - (3) Alternate rows of insertion, and tucking or plain material.  
Plain material such as nainsook, using tucks, lace or any other desired combination.

#### 4 Joining of ruffle or flounce to skirt,

- (a) It may be joined to edge of skirt or placed upon same.
- (b) May be finished by stitching a tuck down over gathers or facing of bias binding or embroidered beading.

Notes E.  
Draughts G+.  
Patterns E.



### Price List of Science Tablets in Sets

The following sets contain tablet, 30 sheets of extra quality ruled note paper, tablet 30 sheets of high grade drawing paper, together with a set of covers. Size of sheets, 7 $\frac{1}{2}$  x 9 $\frac{1}{2}$ .

Set No.	Subject	Board Covers with Cloth Hinges	Retail Price
1	Biology	Lace Fastener	\$0.40
2	"	Button "	.45
3	"	Ring "	.45
4	Botany	Lace "	.40
5	"	Button "	.45
6	"	Ring "	.45
7	Zoology	Lace "	.40
8	"	Button "	.45
9	"	Ring "	.45
10	Physiology	Lace "	.40
11	"	Button "	.45
12	"	Ring "	.45
13	Geology	Lace "	.40
14	"	Button "	.45
15	"	Ring "	.45
16	Astronomy	Lace "	.40
17	"	Button "	.45
18	"	Ring "	.45
19	Blank	Lace "	.40
20	"	Button "	.45
21	"	Ring "	.45

The following sets contain tablet 30 sheets of ruled note paper, together with a set of covers.

Set No.	Subject	Board Covers with Cloth Hinges	Retail Price
22	History	Lace Fastener	\$0.25
23	"	Button "	.30
24	"	Ring "	.30
25	Man. Train.	Lace "	.25
26	"	Button "	.30
27	"	Ring "	.30
28	Dom. Science	Lace "	.25
29	"	Button "	.30
30	"	Ring "	.30
31	Composition	Lace "	.25
32	"	Button "	.30
33	"	Ring "	.30
34	Literature	Lace "	.25
35	"	Button "	.30
36	"	Ring "	.30

The following sets contain tablet, 30 sheets of special ruled paper, together with a set of covers.

Set No.	Subject	Board Covers with Cloth Hinges	Retail Price
37	Rhetoric	Lace Fastener	\$0.25
38	"	Button "	.30
39	"	Ring "	.30
40	English	Lace "	.25
41	"	Button "	.30
42	"	Ring "	.30

The following sets contain a quadrilateral ruled tablet of 75 sheet, together with a set of covers.

Set No.	Subject	Board Covers with Cloth Hinges	Retail Price
43	Physics	Lace Fastener	\$0.30
44	"	Button "	.35
45	"	Ring "	.35
46	Chemistry	Lace "	.30
47	"	Button "	.35
48	"	Ring "	.35
49	Mathematics	Lace "	.30
50	"	Button "	.35
51	"	Ring "	.35
52	Algebra	Lace "	.30
53	"	Button "	.35
54	"	Ring "	.35
55	Geometry	Lace "	.30
56	"	Button "	.35
57	"	Ring "	.35
58	Trigonometry	Lace "	.30
59	"	Button "	.35
60	"	Ring "	.35

Always Order by Number.

### Price List of Science Tablets

(Without Covers)

No.	Description	Retail Price
200	Note tablet of 30 sheets of extra quality <b>unruled</b> paper, perforated to fit covers.	\$0.15
201	Note tablet of 30 sheets of extra quality ruled paper with marginal ruling, perforated to fit covers.	.15
202	Drawing tablet containing 30 sheets extra quality prepared white drawing paper, with marginal ruling and perforated to fit covers.	.20
203	Ledger Drawing tablet, containing 30 sheets high grade smooth paper for pen and ink drawings, with marginal ruling, perforated to fit covers.	.20
204	Metrically ruled tablet, containing 75 sheets metrically ruled paper, note ruling on opposite side of sheet, perforated to fit covers.	\$0.25
205	Rhetoric tablet, containing 30 sheets high grade paper with special marginal ruling, and space on right hand side for making corrections, perforated to fit covers.	.15

### Papers Put Up in Envelopes Perforated to Fit Atlas Science Covers

No.	Description	Retail Price per Envelope
401	Unruled note paper, 30 sheets.	\$0.10
402	Ruled note, with margin, 30 sheets.	.10
403	White drawing, high grade, 20 sheets.	.10
404	Metrically ruled paper, 30 sheets.	.10
405	Rectangular ruled paper, 100 sheets.	.40
406	Equilateral Triangular ruled, 100 sheets.	.40
407	Parallelogram ruled paper, 100 sheets.	.40
408	Polar Co-Ordinate paper, 100 sheets.	.40
409	Ledger Bookkeeping paper, 30 sheets.	.10
410	Journal Bookkeeping paper, 30 sheets.	.10

### The Atlas Herbarium.

Is made in two sizes, 7 $\frac{1}{2}$  x 9 $\frac{1}{2}$  and 11 x 17, and uniform in design with the Atlas Science Tablets.

The portfolio form permits arranging the mounted specimens scientifically according to the genera and species to which they belong. Then, too, the plan permits adding to, or removing from the collection at any time.

Hints on Collecting, Pressing and Mounting specimens are found on inside cover pages. Each sheet contains a legend for classification.

709. For 50 Specimens with Index.....40 cents.

Sample Sheets Free.

117. For 50 Specimens with Index.....75 cents.

### MARQUETTE SKETCH BLOCK.

Contains 35 sheets of heavy white drawing paper, size 9 x 12, suitable for sketching and water color work.

Price.....20 cents.  
Marquette covers, per set.....15 cents.

### BECKLEY-CARDY CO.

Manufacturers and Publishers

Successors to Tablet and Stationery Depts., Atlas Science Supply Co.

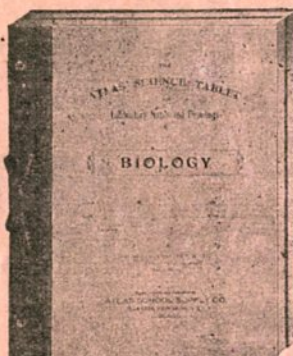
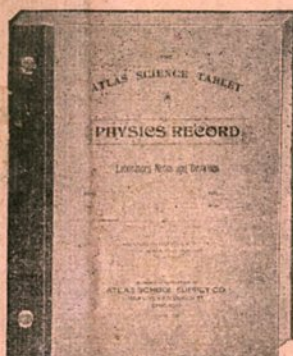
312 W. Randolph Street - - - CHICAGO



# The Atlas Series of Science Tablets

Consisting of Several Tablets and Covers, uniform in size ( $7\frac{3}{4} \times 9\frac{3}{4}$ ) and perforation and specially arranged for laboratory use.

## "ATLAS SERIES" SCIENCE TABLETS



### THE "ATLAS SERIES" SCIENCE TABLETS

Consists of several Tablets and Covers, uniform in size ( $7\frac{3}{4} \times 9\frac{3}{4}$ ) and perforation, and specially arranged for notes and drawing in the following subjects:

BIOLOGY	ASTRONOMY
BOTANY	PHYSIOLOGY
ZOOLOGY	GEOLOGY
PHYSICS	GEOMETRY
CHEMISTRY	ALGEBRA
MATHEMATICS	TRIGONOMETRY
PHYSIOGRAPHY	CALCULUS

Complemented by *The Atlas Herbarium*.

### Advantages of the Drawing and Note Tablets

These Tablets are much more convenient than drawing and note paper, either in bound form or detached sheets, for the following reasons:

- 1 They render the use of the drawing boards and thumb tacks unnecessary.
- 2 They afford a convenient form for keeping the paper in good condition for ready use.
- 3 They enable the instructor to take up completed drawings and description, to be inspected at his leisure, without interrupting the regular work of the pupil.
- 4 They render it easy to discard unsatisfactory work, which the pupil may be required to perform the second time.
- 5 They enable the pupil to remove sheets and thus avoid the danger of injuring work already completed.
- 6 The covers and fastenings afford a convenient way of collecting and temporarily binding work which has been approved and returned by the instructor.
- 7 Work completed and temporarily bound is easily available for classification and arrangement and for permanent binding if desirable.

Send for our complete Catalogue and Price List of  
"Atlas Series" Science Tablets.

## ATLAS OUTLINES

OF

### PHYSIOGRAPHY

ARRANGED BY

CHARLES EMERSON PEET AND RALPH E. BLOUNT

CONSIST OF A CAREFUL ASSORTMENT OF BLANK

#### Weather Maps

#### Astronomical Observation Blanks

#### Weather Observation Blanks

Note, drawing and Co-ordinate ruled paper.  
Extra blanks may be added if desired.

RETAIL PRICE, COMPLETE BOOK, 40 CENTS.

## THE ATLAS OUTLINES

OF

### United States, English, Ancient, Medieval and Modern History

BY

F. W. NICHOLAS, M. P., Ph.

The U. S. History Note Book, containing 100 pages of Topics and Illustrations, arranged for short or long courses, together with 100 pages for writing descriptions; more pages may be added if desired. We divide this Note Book into two parts to make the price within reach of all.

#### PRICES:

	Retail Price
Part I (100 pages)—End of Revolution .....	40c
Part II—(100 pages) From Adoption of Constitution..	40c
Sample mailed for examination .....	25c

Atlas Topics and Illustrations in *English History, Ancient History, Medieval and Modern History* are arranged for short or long courses. Each book contains 50 leaves (100 pages). Additional pages may be added is desired.

	Retail Price
English History .....	40c
Ancient History .....	40c
Medieval and Modern History .....	40c
Samples of either book mailed for examination.....	25c

## FOR ENGLISH GRAMMAR

Arranged by A. F. HARVEY, A. M., AND E. S. GORTON

Contains a complete classification of English Grammar; a Bibliography of modern texts; a reference to the page and section in which each author treats of the topics under discussion; many Examples quoted from the best sources and 50 pages for notes.

RETAIL PRICE, COMPLETE, 40 CENTS

Sample Mailed for Examination 40c. Sample Sheets Free

Manufactured and Published by

**Beckley-Cardy Company**

312 W. Randolph Street

CHICAGO

When buying fillers be sure paper is watermarked "Atlas" do not accept a substitute.